Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Sivyer Steel
Facility Location: 225 South 33rd Street, Bettendorf, IA 52722

Air Quality Operating Permit Number: 02-TV-015
Expiration Date: June 24, 2007

EIQ Number: 92-4700
Facility File Number: 82-02-004

Responsible Official

Name:	**John J. Wolfram**
Title:	**Vice President**
Mailing Address:	**225 South 33rd Street**
	Bettendorf, IA 52722
Phone #:	**(563) 355-1811**

Permit Contact Person for the Facility

Name:	**John J. Wolfram**
Title:	**Vice President**
Mailing Address:	**225 South 33rd Street**
	Bettendorf, IA 52722
Phone #:	**(563) 355-1811**

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section Date

Table of Contents

Abbreviations

acfm .....actual cubic feet per minute
CFR.....Code of Federal Regulation
^{o}F.....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
gr./dscf .....grains per dry standard cubic foot
gr./100 cf.....grains per one hundred cubic feet
IAC .....Iowa Administrative Code
IDNR .....Iowa Department of Natural Resources
MVAC .....motor vehicle air conditioner
NSPS.....new source performance standard
ppmv .....parts per million by volume
lb./hr.....pounds per hour
lb./MMBtu .....pounds per million British thermal units
psig.....pounds per square inch gauge
TPY.....Tons per year
USEPA.....United States Environmental Protection Agency

Pollutants

PM .....particulate matter
PM_{10}.....particulate matter ten microns and less in diameter
SO_2.....sulfur dioxide
NO_x .....nitrogen oxides
VOC.....volatile organic compound
CO.....carbon monoxide
HAP .....hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Sivyer Steel
Permit Number: 02-TV-015

Facility Description: Steel Foundry

Equipment List

Emission Point Number	Associated Emission Unit(s) Number (s)	Associated Emission Unit Description
01	01	Charge Handling
02-1 02-2 02-3 02-4 02-5 02-6 02-7 02-8	02 03 04	Arc Furnace #1 Arc Furnace #2 Arc Furnace #3
03	05 34 37	Mulling (Sand, Water, Bentonite) Green Sand Conveyors and Elevators Green Sand Screens
04	06 35 38	Mulling (Sand, Core oil, Bentonite) Sand Conveyors and Elevators-NoBake Sand Screens-NoBake
05	07 08	Core Oven Core Oven
06	09 10 11	Core Oven Core Oven Core Oven
07	12	Core Oven
08	12A	Core Oven
09	13 14	Production of Shell Cores Production of Shell Cores
10	15 16	Production of Shell Cores Production of Shell Cores
11	17 18	Production of Shell Cores Production of Shell Cores
12	19	Production of Shell Cores
13	20	Production of Shell Cores
14	21	Production of Shell Cores

Emission Point Number	Associated Emission Unit(s) Number(s)	Associated Emission Unit Description
15	22	Production of Sand Cores
	23	Washing and Drying of Cores
16	24	Washing and Drying of Molds
	25	Pouring of Steel into NoBake Molds
	26	Pouring of Steel into Green Sand Molds
	27	Cooling of Green Sand Molds
	28	Cooling of NoBake Molds
	29	Electric Induction Furnace
17	30	Washing and Drying of Molds
18	31	Pouring of Steel into Shell Molds
19	31	Pouring of Steel into Shell Molds
20	32	Cooling of Shell Molds
	33	Shakeout of Shell Castings
21	36	Shakeout of Castings
	95	Shot Cleaning of Castings
22	39	Shakeout of Castings - NoBake
23	40	Sand Conveyors & Elevators - Shell Process
24	41	Oxy/Gas Cutting
26	43	Arc-Air Repair
27	44	Arc-Air Repair
28	45	Arc-Air Repair
29	46	Arc-Air Repair
30	47	Wheelabrater #1
31	48	Wheelabrater #2
32	49	Wheelabrater #3
33	50	Grinding of Castings
	51A	Shot Cleaning of Castings
	51B	Sand Heater
	51C	Ceramic Cutoff Saw
34	52	Casting Cleaning/Chipper
35	53	Casting Cleaning/Chipper
36	54	Casting Cleaning/Chipper
37	55	Casting Cleaning/Chipper
38	56	Casting Cleaning/Chipper
39	57	Casting Cleaning/Chipper
40	58	Casting Cleaning/Chipper
41	59	Casting Cleaning/Chipper
42	60	Casting Cleaning/Chipper
43	61	Casting Cleaning/Chipper

Emission Point Number	Associated Emission Unit(s) Number(s)	Associated Emission Unit Description
44	62	Heat Treatment of Castings
	63	Heat Treatment of Castings
	64	Heat Treatment of Castings
	65	Heat Treatment of Castings
	66	Heat Treatment of Castings
	66A	Heat Treatment of Castings
	67	Heat Treatment of Castings
	68	Heat Treatment of Castings
	69	Heat Treatment of Castings
	70	Heat Treatment of Castings
	71	Heat Treatment of Castings
45	72	Sand Transport
46	73	Painting of Castings
49	77	Casting Welding
	78	Casting Welding
	79	Casting Welding
	80	Casting Welding
	81	Casting Welding
	82	Casting Welding
50	83	Casting Welding
	84	Casting Welding
51	85	Sand Bulk Loading
52	86	Sand Storage Pile
53	87	Burn-Off Bench #1
54	88	Burn-Off Bench #2
55	89	Burn-Off Bench #3
57	91	Space Heaters
58	92	Grinding of Castings
74	74	Rust-Proofing of Castings

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
MW	Maintenance Welding
PW	2 Parts Washers

II. Plant-Wide Conditions

Facility Name: Sivyer Steel
Permit Number: 02-TV-015

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years
Commencing on: June 25, 2002
Ending on: June 24, 2007

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)[1]:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

[1] This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

Particulate Matter (federally enforceable)[2]:
The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.
Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Sivyer Steel is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Sivyer Steel shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

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[2] This is the current language in the Iowa SIP, and is enforceable by EPA.

Section 112(j) of the Clean Air Act (MACT Hammer) Compliance Plan

Sivyer Steel appears to be subject to the upcoming MACT standards for Iron and Steel Foundries, 40 CFR 63 Subpart EEEEE and Industrial/Commercial/Institutional Boilers, 40 CFR 63 Subpart DDDDD. Since these MACT standards were not promulgated by May 15, 2002, the facility was required to submit a Part 1 MACT application to IDNR by that date. This requirement has not been fulfilled. Sivyer Steel must submit a Part 1 MACT application to IDNR by July 25, 2002. The facility must also submit a Part 2 MACT application to IDNR by the deadline specified in 40 CFR 63.52(e), if 40 CFR 63 Subparts EEEEE and DDDDD have not been promulgated by that date.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

III. Emission Point-Specific Conditions

Facility Name: Sivyer Steel
Permit Number: **02-TV-015**

Emission Point ID Number: 01

Associated Equipment

Associated Emission Unit ID Numbers: 01

Applicable Requirements

Emission Unit vented through this Emission Point: 01
Emission Unit Description: Charge Handing
Raw Material/Fuel: Steel
Rated Capacity: 15 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 02-1, 02-2, 02-3, 02-4, 02-5, 02-6, 02-7, 02-8

Associated Equipment

Associated Emission Unit ID Numbers: 02, 03, 04
Emissions Control Equipment ID Number: 02
Emissions Control Equipment Description: Baghouse

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity	Control ID
02-1 02-2 02-3 02-4 02-5 02-6 02-7 02-8	 02 03 04	 Arc Furnace #1 Arc Furnace #2 Arc Furnace #3	 Steel Steel Steel	 5 tons/hr 5 tons/hr 5 tons/hr	 02

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: Iowa DNR Construction Permit 73-A-180 (EU 02)
Iowa DNR Construction Permit 72-A-139 (EU 03 and EU 04)
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 73-A-180 (EU 02)
Iowa DNR Construction Permit 72-A-139 (EU 03 and EU 04)
567 IAC 23.4(5)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter*
1st Stack Test to be Completed by (date) – June 25, 2003
2nd Stack Test to be Completed between (dates) – December 25, 2004 – December 25, 2005
Test Method - Iowa Compliance Sampling Manual[(1)]
[(1)] or an approved alternative
Authority for Requirement - 567 IAC 22.108(3)"b"

*One of the eight emission points (EP 02-1, EP 02-2, EP 02-3, EP 02-4, EP 02-5, EP 02-6, EP 02-7, and EP 02-8) shall be tested. If the emission point that was chosen to be tested fails the stack test, then the tested emission point which failed shall be retested and the other seven emission points will be required to be tested also.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Sivyer Steel Corporation
Agency O&M Plan
EP 2: Arc Furnace Exhaust Baghouse

Baghouse Parameters:

Manufacturer: American Air Filter
Model: 5-126L
Material Handled: Steel
Moisture Problems Possible: ☐ Yes ☑ No
Material Corrosive: ☐ Yes ☑ No
Operating Temperature: 125^{o}F

Weekly Maintenance Procedures:

The facility will monitor the pressure drop across the baghouse on a weekly basis. If the baghouse is operating outside of 1-3" of water, the baghouse will be shaken. If this does not return the pressure drop to the normal range within eight hours, the equipment will be inspected to determine the cause of the abnormal pressure readings. Corrective action will be initiated within eight hours to bring the baghouse back within normal operating parameters.
Visible emissions will be observed weekly to ensure no visible emissions during the operation of the arc furnaces. If visible emissions are observed, this would be an exceedance, not a violation and corrective action will be initiated as soon as possible but no later than eight hours. If weather conditions prevent the observer from conducting an opacity observation, this should be noted and a reading should be attempted the following day and each subsequent day until a reading is taken or there have been three consecutive unsuccessful attempts to take a reading.

Monthly Maintenance Procedures:

- The baghouse will be shaken monthly to ensure that the shaking function is working properly
- The hopper will be inspected to ensure proper performance

Quarterly Maintenance Procedures:

- Thoroughly inspect bags for leaks and wear. Look for obvious holes or tears in the bags.
- Document any bag changes and the date of the change on a bag diagram shown on work orders.

Semi-Annual Maintenance Procedures:

- Inspect all components not subject to wear or plugging such as the equipment housing, duct work and collection hoods. If any defective equipment is noted, the equipment should be repaired or replaced promptly with action initiated within 8 hours of discovery.

Recordkeeping:

The following records should be kept for a period not less than five years:

- Weekly visible emissions readings
- Weekly pressure drop across the baghouse
- Monthly inspection report
- Quarterly inspection report
- Semi-annual inspection report
- Maintenance records

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 03

Associated Equipment

Associated Emission Unit ID Numbers: 05, 34 , 37
Emissions Control Equipment ID Number: 03
Emissions Control Equipment Description: Venturi Scrubber

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity	Control ID
03	05	Mulling (Sand, Water, Bentonite)	Sand, Water, Bentonite	100 tons/hr Sand	03
	34	Green Sand Conveyors and Elevators	Sand	100 tons/hr	03
	37	Green Sand Screens	Sand	100 tons/hr	03

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: Iowa DNR Construction Permit 74-A-154
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 51.2 lb./hr(1)
(1) based on a process weight rate of 100 tons/hr
Authority for Requirement: Iowa DNR Construction Permit 74-A-154
567 IAC 23.3(2)"a"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:
Pollutant - Particulate Matter
1st Stack Test to be Completed by (date) – June 25, 2003
2nd Stack Test to be Completed between (dates) – December 25, 2004 – December 25, 2005
Test Method - Iowa Compliance Sampling Manual(1)
(1) or an approved alternative
Authority for Requirement - 567 IAC 22.108(3)"b"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Sivyer Steel Corporation
Agency Operation and Maintenance Plan
EP 3: Green Sand System

Control Equipment Type:	Venturi Scrubber
Manufacturer:	Environeering
Model:	A-33 Wet Scrubber, F-74358-1
Equipment Controlled:	EU 05: Green Sand Mulling
	EU 34: Green Sand Conveyor
	EU 37: Green Sand Screens

Daily Monitoring:

1) The stack shall be observed on a daily basis to ensure no visible emissions during the material handling process. If weather prevents observation, readings should be attempted every two hours until a reading is successfully taken. If visible emissions are observed, corrective action will be taken within eight hours.
2) Document the pressure drop across the scrubber. If the pressure drop is outside of 5-9" of water, the scrubber will be serviced to restore a normal operating range within 16 hours.
3) Observe the stack and adjacent areas for evidence of mist. Such evidence may include discoloration of the stack, a muddy appearance around the base of the stack, or solid-containing droplets coming from the stack. If such evidence is present the mist eliminator will be serviced within eight hours.

Weekly Monitoring:

Check liquid pressure gauges (should read 12 psig) on supply headers to the scrubber to monitor for problems such as nozzle or header plugging (high pressure), or nozzle erosion (low pressure). Corrective action will be taken within eight hours.

Quarterly:

Inspect all equipment for leaks. Any leaks detected will be serviced within eight hours.

Semi-Annually:

Inspect the internal components of the scrubber to search for signs of erosion, corrosion, or solid deposits. Any damaged parts should be cleaned or repaired within eight hours of detection.

Recordkeeping:

The following records should be kept for a period not less than five years:

- Daily visible emissions readings
- Daily pressure drop across the scrubber
- Daily stack condition
- Weekly liquid pressure
- Quarterly inspection report
- Semi-annual inspection report
- Maintenance records

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 04

Associated Equipment

Associated Emission Unit ID Numbers: 06, 35, 38
Emissions Control Equipment ID Number: 04
Emissions Control Equipment Description: Venturi Scrubber

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity	Control ID
04	06	Green Sand Screens	Sand, Bentonite, Core Oil	2 tons/hr Sand	04
	35	Sand Conveyors and Elevators-NoBake	Sand	30 tons/hr	04
	38	Sand Screens-NoBake	Sand	30 tons/hr	04

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 46.6 lb./hr(1)
(1) based on a process weight rate of 62 tons/hr
Authority for Requirement: Iowa DNR Construction Permit 76-A-222
567 IAC 23.3(2)"a"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:
Pollutant - Particulate Matter
1st Stack Test to be Completed by (date) – June 25, 2003
2nd Stack Test to be Completed between (dates) – December 25, 2004 – December 25, 2005
Test Method - Iowa Compliance Sampling Manual(1)
(1) or an approved alternative
Authority for Requirement - 567 IAC 22.108(3)"b"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Sivyer Steel Corporation
Agency Operation and Maintenance Plan
EP 4: Core System

Control Equipment Type:	Venturi Scrubber
Manufacturer:	Environeering
Model:	A-33 Wet Scrubber, F-76015
Equipment Controlled:	EU 06: Sand Mulling
	EU 35: No-Bake Sand Conveyors and Elevators
	EU 38: No-Bake Sand Screens

Daily Monitoring:

1) The stack shall be observed on a daily basis to ensure no visible emissions during the material handling process. If weather prevents observation, readings should be attempted every two hours until a reading is successfully taken. If visible emissions are observed, corrective action will be taken within eight hours.
2) Document the pressure drop across the scrubber. If the pressure drop is outside of 5-9" of water, the scrubber will be serviced to restore a normal operating range within eight hours.
3) Observe the stack and adjacent areas for evidence of mist. Such evidence may include discoloration of the stack, a muddy appearance around the base of the stack, or solid-containing droplets coming from the stack. If such evidence is present the mist eliminator will be serviced within eight hours.

Weekly Monitoring:

Check liquid pressure gauges (should read 12 psig) on supply headers to the scrubber to monitor for problems such as nozzle or header plugging (high pressure), or nozzle erosion (low pressure). Corrective action will be taken within eight hours.

Quarterly:

Inspect all equipment for leaks. Any leaks detected will be serviced within eight hours.

Semi-Annually:

Inspect the internal components of the scrubber to search for signs of erosion, corrosion, or solid deposits. Any damaged parts should be cleaned or repaired within eight hours of detection.

Recordkeeping:

The following records should be kept for a period not less than five years:

- Daily visible emissions readings
- Daily pressure drop across the scrubber
- Daily stack condition
- Weekly liquid pressure
- Quarterly inspection report
- Semi-annual inspection report
- Maintenance records

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 05

Associated Equipment

Associated Emission Unit ID Numbers: 07 and 08
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
05	07	Core Oven	Core Oil, Sand, and Natural Gas	0.045 tons/hr Sand and 1 MMBtu/hr Natural Gas
	08	Core Oven	Core Oil, Sand, and Natural Gas	0.045 tons/hr Sand and 1 MMBtu/hr Natural Gas

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 0.82 lb./hr[(1)]
[(1)] based on a process weight rate of 0.09 tons/hr
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 06

Associated Equipment

Associated Emission Unit ID Numbers: 09, 10, 11
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
06	09	Core Oven	Core Oil, Sand, and Natural Gas	0.045 tons/hr Sand and 1 MMBtu/hr Natural Gas
	10	Core Oven	Core Oil, Sand, and Natural Gas	0.045 tons/hr Sand and 1 MMBtu/hr Natural Gas
	11	Core Oven	Core Oil, Sand, and Natural Gas	0.045 tons/hr Sand and 1 MMBtu/hr Natural Gas

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 1.07 lb./hr[(1)]
[(1)] based on a process weight rate of 0.135 tons/hr
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 07 and 08

Associated Equipment

Associated Emission Unit ID Numbers: 12 and 12A
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
07	12	Core Oven	Core Oil, Sand, and Natural Gas	0.113 tons/hr Sand and 1 MMBtu/hr Natural Gas
08	12A	Core Oven	Core Oil, Sand, and Natural Gas	0.113 tons/hr Sand and 1 MMBtu/hr Natural Gas

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 0.95 lb./hr[(1)]
[(1)] based on a process weight rate of 0.113 tons/hr
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 09, 10, 11, 12, 13, 14, 15, 16

Associated Equipment

Associated Emission Unit ID Numbers: 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29

Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
09	13	Production of Shell Cores	Sand, Resin, and Natural Gas	0.08 tons/hr Sand and 0.5 MMBtu/hr Natural Gas
	14	Production of Shell Cores	Sand, Resin, and Natural Gas	0.08 tons/hr Sand and 0.5 MMBtu/hr Natural Gas
10	15	Production of Shell Cores	Sand, Resin, and Natural Gas	0.08 tons/hr Sand and 0.5 MMBtu/hr Natural Gas
	16	Production of Shell Cores	Sand, Resin, and Natural Gas	0.08 tons/hr Sand and 0.5 MMBtu/hr Natural Gas
11	17	Production of Shell Cores	Sand, Resin, and Natural Gas	0.08 tons/hr Sand and 0.5 MMBtu/hr Natural Gas
	18	Production of Shell Cores	Sand, Resin, and Natural Gas	0.08 tons/hr Sand and 0.5 MMBtu/hr Natural Gas
12	19	Production of Shell Cores	Sand, Resin, and Natural Gas	0.42 tons/hr Sand and 0.81 MMBtu/hr Natural Gas
13	20	Production of Shell Cores	Sand, Resin, and Natural Gas	0.42 tons/hr Sand and 0.81 MMBtu/hr Natural Gas
14	21	Production of Shell Cores	Sand, Resin, and Natural Gas	0.42 tons/hr Sand and 0.81 MMBtu/hr Natural Gas
15	22	Production of Sand Cores	Sand	9 tons/hr Sand
	23	Washing and Drying of Cores	Wash Compound	0.05 tons/hr
16	24	Washing and Drying of Molds	Wash Compound	0.05 tons/hr
	25	Pouring of Steel Into NoBake Molds	Steel	3.45 tons/hr
	26	Pouring of Steel Into Green Sand Molds	Steel	26 tons/hr
	27	Cooling of Green Sand Molds	Steel	26 tons/hr
	28	Cooling of NoBake Molds	Steel	3.45 tons/hr
	29	Electric Induction Furnace	Steel	1 ton/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered , repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 17

Associated Equipment

Associated Emission Unit ID Numbers: 30
Emissions Control Equipment ID Number: none

Applicable Requirements

Emission Unit vented through this Emission Point: 17
Emission Unit Description: Washing and Drying of Molds
Raw Material/Fuel: Wash Compound
Rated Capacity: 0.05 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %[(1)]

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, if visible emissions are observed other than start-up, shut-down, or malfunction, the owner/operator shall promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-126
567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limits: 0.12 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 02-A-126

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 02-A-126
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter
Emission Limit(s): 0.643 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 02-A-126

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 02-A-126

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Track the amount of wash material being used in EU-30 on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 02-A-126

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 18
Stack Diameter (inches): 36
Stack Exhaust Flow Rate (scfm): 15,000
Stack Temperature (^oF): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-126

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant – PM_{10}
1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-126. *Note: 02-A-126 was issued February 28, 2002. Testing has been scheduled with the Department.*
Test Method – 40 CFR 51, Appendix M, 201A with $202^{(1)}$
$^{(1)}$ or an approved alternative
Authority for Requirement – Iowa DNR Construction Permit 02-A-126

Pollutant - Particulate Matter
1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-126. *Note: 02-A-126 was issued February 28, 2002. Testing has been scheduled with the Department.*
Test Method - Iowa Compliance Sampling Manual Method 5 [(1)]
[(1)] or an approved alternative
Authority for Requirement – Iowa DNR Construction Permit 02-A-126

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 18 and 19

Associated Equipment

Associated Emission Unit ID Numbers: 31
Emissions Control Equipment ID Number: none

Applicable Requirements

Emission Unit vented through this Emission Point: 31
Emission Unit Description: Pouring of Steel into Shell Molds
Raw Material/Fuel: Steel
Rated Capacity: 0.94 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %[(1)]

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permits 02-A-127 (EP 18) &
02-A-128 (EP 19)
567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limits: 0.011 lb./hr
Authority for Requirement: Iowa DNR Construction Permits 02-A-127 (EP 18) &
02-A-129 (EP 19)

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permits 02-A-127 (EP 18) &
02-A-129 (EP 19)
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter
Emission Limit(s): 0.528 lb./hr
Authority for Requirement: Iowa DNR Construction Permits 02-A-127 (EP 18) & 02-A-129 (EP 19)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permits 02-A-127 (EP 18) & 02-A-129 (EP 19)
567 IAC 23.3(3)"e"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Track the amount of material being used in EU-31 on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permits 02-A-127 (EP 18) & 02-A-129 (EP 19)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	Stack Height (feet from the ground)	Stack Opening (inches)	Stack Exhaust Rate (scfm)	Stack Temperature (^oF)	Discharge Type	Authority For Requirement
18	47	44	12,325	400	Vertical Unobstructed	02-A-127
19	47	44	12,325	400	Vertical Unobstructed	02-A-128

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant – PM_{10}*

1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-127 (EP 18) and 02-A-128 (EP 19). *Note: 02-A-127 and 02-A-128 were issued February 28, 2002. Testing has been scheduled with the Department.*

Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]

[(1)] or an approved alternative

Authority for Requirement – Iowa DNR Construction Permit 02-A-127 (EP 18) And 02-A-128 (EP 19)

Pollutant - Particulate Matter*

1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-127 (EP 18) and 02-A-128 (EP 19). *Note: 02-A-127 and 02-A-128 were issued February 28, 2002. Testing has been scheduled with the Department.*

Test Method - Iowa Compliance Sampling Manual Method 5 [(1)]

[(1)] or an approved alternative

Authority for Requirement – Iowa DNR Construction Permit 02-A-127 (EP 18) And 02-A-128 (EP 19)

* Either EP 18 or EP 19 shall be tested for PM and PM_{10}. If the emission point that is chosen to be tested fails the stack test, then the tested emission point shall be retested and the non-tested emission point will be required to be tested also.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 20

Associated Equipment

Associated Emission Unit ID Numbers: 32 and 33
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
20	32	Cooling of Shell Molds	Steel	1.88 tons/hr
	33	Shakeout of Shell Castings	Steel	1.88 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %(1)

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-129
567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limits: 0.180 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 02-A-129

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 02-A-129
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter
Emission Limit(s): 1.026 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 02-A-129

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 02-A-129
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Track the amount of wash material being used in EU 32 and EU 33 on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 02-A-129

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 19
Stack Diameter (inches): 42
Stack Exhaust Flow Rate (scfm): 24,000
Stack Temperature (^oF): 110
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-129

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant – PM_{10}
1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-129. *Note: 02-A-126 was issued February 28, 2002. Testing has been scheduled with the Department.*
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
[(1)] or an approved alternative
Authority for Requirement – Iowa DNR Construction Permit 02-A-129

Pollutant - Particulate Matter
1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-129. *Note: 02-A-126 was issued February 28, 2002. Testing has been scheduled with the Department.*
Test Method - Iowa Compliance Sampling Manual Method 5 [(1)]
[(1)] or an approved alternative
Authority for Requirement – Iowa DNR Construction Permit 02-A-129

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 21

Associated Equipment

Associated Emission Unit ID Numbers: 36 and 95
Emissions Control Equipment ID Number: 21
Emissions Control Equipment Description: Venturi Scrubber

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity	Control ID
21	36	Shakeout of Castings	Steel	100 tons/hr	21
	95	Shot Cleaning of Castings	Steel	2 tons/hr	21

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 74-A-153-S1
567 IAC 23.3(2)"d"

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.05 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 74-A-153-S1
567 IAC 23.4(6)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- Operate the wet scrubber according to manufacturer's specifications.
- Operate the wet scrubber at all times EU-36 and EU-95 are being operated.

Reporting & Record keeping:

The records listed below shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the maintenance performed on the wet scrubber on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 74-A-153-S1

Emission Point Characteristics

This emission point shall specifications to the conditions listed below.

Stack Height (feet from the ground): 30
Stack Diameter (inches): 30 x 48
Stack Exhaust Flow Rate (scfm): 40,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 74-A-153-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Sivyer Steel Corporation
Agency Operation and Maintenance Plan
EP 21: Castings Shakeout and Shot Cleaning

Control Equipment Type:	Venturi Scrubber
Manufacturer:	Environeering
Model:	A-33 Wet Scrubber, F-74358-3
Equipment Controlled:	EU 36: Casting Shakeout
	EU 95: Shot Cleaning of Castings

Daily Monitoring:

1) The stack shall be observed on a daily basis to ensure no visible emissions during the material handling process. If weather prevents observation, readings should be attempted every two hours until a reading is successfully taken. If visible emissions are observed, corrective action will be taken within eight hours.
2) Document the pressure drop across the scrubber. If the pressure drop is outside of 5-9" of water, the scrubber will be serviced to restore a normal operating range within eight hours.
3) Observe the stack and adjacent areas for evidence of mist. Such evidence may include discoloration of the stack, a muddy appearance around the base of the stack, or solid-containing droplets coming from the stack. If such evidence is present the mist eliminator will be serviced within eight hours.

Weekly Monitoring:

Check liquid pressure gauges (should read 12 psig) on supply headers to the scrubber to monitor for problems such as nozzle or header plugging (high pressure), or nozzle erosion (low pressure). Corrective action will be taken within eight hours.

Quarterly:

Inspect all equipment for leaks. Any leaks detected will be serviced within eight hours.

Semi-Annually:

Inspect the internal components of the scrubber to search for signs of erosion, corrosion, or solid deposits. Any damaged parts should be cleaned or repaired within eight hours of detection.

Recordkeeping:

The following records should be kept for a period not less than five years:

- Daily visible emissions readings
- Daily pressure drop across the scrubber
- Daily stack condition
- Weekly liquid pressure

- Quarterly inspection report
- Semi-annual inspection report
- Maintenance records

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 22

Associated Equipment

Associated Emission Unit ID Numbers: 39
Emissions Control Equipment ID Number: 22
Emissions Control Equipment Description: Venturi Scrubber

Applicable Requirements

Emission Unit vented through this Emission Point: 39
Emission Unit Description: Shakeout of Castings-NoBake
Raw Material/Fuel: Steel
Rated Capacity: 50 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: Iowa DNR Construction Permit 74-A-151
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 44.6 lb./hr[(1)]
[(1)] based on a process weight rate of 50 tons/hr
Authority for Requirement: Iowa DNR Construction Permit 74-A-151
567 IAC 23.3(2)"a"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Sivyer Steel Corporation
Agency Operation and Maintenance Plan
EP 22: No-Bake Shakeout

Control Equipment Type:	Venturi Scrubber
Manufacturer:	Environeering
Model:	A-33 Wet Scrubber, F-74358-2
Equipment Controlled:	EU 39: No-Bake Casting Shakeout

Daily Monitoring:

1) The stack shall be observed on a daily basis to ensure no visible emissions during the material handling process. If weather prevents observation, readings should be attempted every two hours until a reading is successfully taken. If visible emissions are observed, corrective action will be taken within eight hours.
2) Document the pressure drop across the scrubber. If the pressure drop is outside of 5-9" of water, the scrubber will be serviced to restore a normal operating range within eight hours.
3) Observe the stack and adjacent areas for evidence of mist. Such evidence may include discoloration of the stack, a muddy appearance around the base of the stack, or solid-containing droplets coming from the stack. If such evidence is present the mist eliminator will be serviced within eight hours.

Weekly Monitoring:

Check liquid pressure gauges (should read 12 psig) on supply headers to the scrubber to monitor for problems such as nozzle or header plugging (high pressure), or nozzle erosion (low pressure). Corrective action will be taken within eight hours.

Quarterly:

Inspect all equipment for leaks. Any leaks detected will be serviced within eight hours.

Semi-Annually:

Inspect the internal components of the scrubber to search for signs of erosion, corrosion, or solid deposits. Any damaged parts should be cleaned or repaired within eight hours of detection.

Recordkeeping:

The following records should be kept for a period not less than five years:

- Daily visible emissions readings
- Daily pressure drop across the scrubber
- Daily stack condition
- Weekly liquid pressure
- Quarterly inspection report
- Semi-annual inspection report
- Maintenance records

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 23

Associated Equipment

Associated Emission Unit ID Numbers: 40
Emissions Control Equipment ID Number: none

Applicable Requirements

Emission Unit vented through this Emission Point: 40
Emission Unit Description: Sand Conveyors Elevators-Shell Process
Raw Material/Fuel: Sand
Rated Capacity: 1.25 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %[(1)]

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-130
567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limits: 0.680 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 02-A-130

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 02-A-130
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter
Emission Limit(s): 0.857 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 02-A-130

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 19
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-130

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant – PM_{10}
1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-130. *Note: 02-A-130 was issued February 28, 2002. Testing has been scheduled with the Department.*
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
[(1)] or an approved alternative
Authority for Requirement – Iowa DNR Construction Permit 02-A-130

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 24

Associated Equipment

Associated Emission Unit ID Numbers: 41
Emissions Control Equipment ID Number: none

Applicable Requirements

Emission Unit vented through this Emission Point: 41
Emission Unit Description: Oxy/Gas Cutting
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.004 MMcf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 26, 27, 28, 29

Associated Equipment

Associated Emission Unit ID Numbers: 43, 44, 45, 46
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
26	43	Arc-Air Repair	Carbon Rods and Steel	1 ton/hr Steel
27	44	Arc-Air Repair	Carbon Rods and Steel	1 ton/hr Steel
28	45	Arc-Air Repair	Carbon Rods and Steel	1 ton/hr Steel
29	46	Arc-Air Repair	Carbon Rods and Steel	1 ton/hr Steel

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 4.10 lb./hr[(1)]
[(1)] based on a process weight rate of 1 ton/hr
Authority for Requirement: 567 IAC 23.3(2)"a"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 30, 31, 32

Associated Equipment

Associated Emission Unit ID Numbers: 47, 48, 49
Emissions Control Equipment ID Number: 30, 31, 32
Emissions Control Equipment Description: Baghouses

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity	Control ID
30	47	Wheelabrator #1	Steel	0.33 tons/hr	30
31	48	Wheelabrator #2	Steel	0.33 tons/hr	31
32	49	Wheelabrator #3	Steel	0.33 tons/hr	32

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 1.95 lb./hr[(1)]
[(1)] based on a process weight rate of 0.33 tons/hr
Authority for Requirement: 567 IAC 23.3(2)"a"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 33

Associated Equipment

Associated Emission Unit ID Numbers: 50, 51A, 51B, and 51C
Emissions Control Equipment ID Number: 33
Emissions Control Equipment Description: Baghouse

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity	Control ID
33	50	Grinding of Castings	Steel	1 ton/hr	33
	51A	Shot Cleaning of Castings	Steel	5 tons/hr	33
	51B	Sand Heater	Sand and Natural Gas	30 tons/hr Sand and 0.2 MMBtu/hr Natural Gas	33
	51C	Ceramic Cutoff Saw	Collars	0.027 ton/hr	33

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limits: 41.58 lb./hr[(1)]
[(1)] based on a process weight rate of 36.03 tons/hr
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv (for natural gas combustion units)
Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter
1st Stack Test to be Completed by (date) – June 25, 2003
2nd Stack Test to be Completed between (dates) – December 25, 2004 – December 25, 2005
Test Method - Iowa Compliance Sampling Manual(1)
(1) or an approved alternative
Authority for Requirement - 567 IAC 22.108(3)"b"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Sivyer Steel Corporation
Agency Operation and Maintenance Plan
EP 33: Grinding and Cleaning

Control Equipment Type:	Baghouse
Manufacturer:	Wheelabrator-Frye
Model:	171, Size 1217
Equipment Controlled:	EU 50 Grinding of Castings
	EU 51A Shot Cleaning of Castings
	EU 51B Sand Heater
	EU 51C Ceramic Cutoff Saw

Weekly Maintenance Procedures:

The facility will monitor the pressure drop across the baghouse on a weekly basis. If the baghouse is operating outside of 1-3" of water, the baghouse will be shaken. If this does not return the pressure drop to the normal range within eight hours, the equipment will be inspected to determine the cause of the abnormal pressure readings. Corrective action will be initiated within eight hours to bring the baghouse back within normal operating parameters.
Visible emissions will be observed weekly to ensure no visible emissions during the operation of the arc furnaces. If visible emissions are observed, this would be an exceedance, not a violation and corrective action will be initiated as soon as possible but no later than eight hours. If weather

conditions prevent the observer from conducting an opacity observation, this should be noted and a reading should be attempted the following day and each subsequent day until a reading is taken or there have been three consecutive unsuccessful attempts to take a reading.

Monthly Maintenance Procedures:

- The baghouse will be shaken monthly to ensure that the shaking function is working properly
- The hopper will be inspected to ensure proper performance

Quarterly Maintenance Procedures:

- Thoroughly inspect bags for leaks and wear. Look for obvious holes or tears in the bags.
- Document any bag changes and the date of the change on a bag diagram shown on workorders.

Semi-Annual Maintenance Procedures:

- Inspect all components not subject to wear or plugging such as the equipment housing, duct work and collection hoods. If any defective equipment is noted, the equipment should be repaired or replaced promptly with action initiated within 8 hours of discovery.

Recordkeeping:

The following records should be kept for a period not less than five years:

- Weekly visible emissions readings
- Weekly pressure drop across the baghouse
- Monthly inspection report
- Quarterly inspection report
- Semi-annual inspection report
- Maintenance records

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 34, 35, 36, 37, 38, 39, 40, 41, 42, 43

Associated Equipment

Associated Emission Unit ID Numbers: 52, 53, 54, 55, 56, 57, 58, 59, 60, 61
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
34	52	Casting Cleaning/Chipper	Steel	0.5 tons/hr
35	53	Casting Cleaning/Chipper	Steel	0.5 tons/hr
36	54	Casting Cleaning/Chipper	Steel	0.5 tons/hr
37	55	Casting Cleaning/Chipper	Steel	0.5 tons/hr
38	56	Casting Cleaning/Chipper	Steel	0.5 tons/hr
39	57	Casting Cleaning/Chipper	Steel	0.5 tons/hr
40	58	Casting Cleaning/Chipper	Steel	0.5 tons/hr
41	59	Casting Cleaning/Chipper	Steel	0.5 tons/hr
42	60	Casting Cleaning/Chipper	Steel	0.5 tons/hr
43	61	Casting Cleaning/Chipper	Steel	0.5 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %[(1)]

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, if visible emission are observed other than start-up, shut-down, or malfunction, the owner/operator shall promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)
567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limits: 0.002 lb./hr
Authority for Requirement: Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter
Emission Limit(s): 0.185 lb./hr
Authority for Requirement: Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Track the amount of throughput in EU 52, EU 53, EU 54, EU 55, EU 56, EU 57, EU 58, EU 59, EU 60, and EU 61 on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet from the ground)	Stack Opening (inches)	Stack Exhaust Rate (scfm)	Stack Temperature (^{o}F)	Discharge Type	Authority For Requirement
34	25	24	10,800	Ambient	Vertical Unobstructed	02-A-131
35	25	24	10,800	Ambient	Vertical Unobstructed	02-A-132
36	25	24	10,800	Ambient	Vertical Unobstructed	02-A-133
37	25	24	10,800	Ambient	Vertical Unobstructed	02-A-134

EP	Stack Height (feet from the ground)	Stack Opening (inches)	Stack Exhaust Rate (scfm)	Stack Temperature (^{o}F)	Discharge Type	Authority For Requirement
38	25	24	10,800	Ambient	Vertical Unobstructed	02-A-135
39	28	24	10,800	Ambient	Vertical Unobstructed	02-A-136
40	28	24	10,800	Ambient	Vertical Unobstructed	02-A-137
41	28	24	10,800	Ambient	Vertical Unobstructed	02-A-138
42	28	24	10,800	Ambient	Vertical Unobstructed	02-A-139
43	28	24	10,800	Ambient	Vertical Unobstructed	02-A-140

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant – PM_{10}*

1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43). *Note: All ten construction permits listed above were issued February 28, 2002. Testing has been scheduled with the Department.*

Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]

[(1)] or an approved alternative

Authority for Requirement – Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)

*Three of the ten emission points (EP 34, EP 35, EP 36, EP 37, EP 38, EP 39, EP 40, EP 41, EP 42, and EP 43) shall be tested. If any one of the three emission points that are chosen to be tested fail the stack test, then the tested emission point which failed shall be retested and the other seven emission points will be required to be tested also.

Pollutant - Particulate Matter*

1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43). *Note: All ten construction permits listed above were issued February 28, 2002. Testing has been scheduled with the Department.*

Test Method - Iowa Compliance Sampling Manual Method 5 [(1)]
[(1)] or an approved alternative

Authority for Requirement – Iowa DNR Construction Permits 02-A-131 (EP 34), 02-A-132 (EP 35), 02-A-133 (EP 36), 02-A-134 (EP 37), 02-A-135 (EP 38), 02-A-136 (EP 39), 02-A-137 (EP 40), 02-A-138 (EP 41), 02-A-139 (EP 42), 02-A-140 (EP 43)

*Three of the ten emission points (EP 34, EP 35, EP 36, EP 37, EP 38, EP 39, EP 40, EP 41, EP 42, and EP 43) shall be tested. If any one of the three emission points that are chosen to be tested fail the stack test, then the tested emission point which failed shall be retested and the other seven emission points will be required to be tested also.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 44, 45

Associated Equipment

Associated Emission Unit ID Numbers: 62, 63, 64, 65, 66, 66A, 67, 68, 69, 70, 71, 72
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
44	62	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	63	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	64	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	65	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	66	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	66A	Heat Treatment of Castings	Natural Gas	0.006 MMcf/hr
	67	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	68	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	69	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	70	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
	71	Heat Treatment of Castings	Natural Gas	0.008 MMcf/hr
45	72	Sand Transport	Sand	1 ton/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 46

Associated Equipment

Associated Emission Unit ID Numbers: 73
Emissions Control Equipment ID Number: 46
Emissions Control Equipment Description: Mat Filter

Applicable Requirements

Emission Unit vented through this Emission Point: 73
Emission Unit Description: Painting of Castings
Raw Material/Fuel: Paint
Rated Capacity: 0.005 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %[(1)]

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, if visible emission are observed other than start-up, shut-down, or malfunction, the owner/operator shall promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permits 02-A-141
567 IAC 23.3(2)"d"

Pollutant: PM_{10}
Emission Limits: 0.360 lb./hr
Authority for Requirement: Iowa DNR Construction Permits 02-A-141

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permits 02-A-141
567 IAC 23.4(13)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The solids content of the as-sprayed material is limited to 10.0 pounds per gallon.
2. The VOC content of the as-sprayed material is limited to 4.0 pounds per gallon.
3. The Painting of Castings Paint Booth consisting of emission point 46 is limited to 5000 gallons per rolling 12-month period of as-sprayed for paint and solvent usage.
4. The solvent is limited to a maximum VOC content of 7.5 pounds per gallon.
5. The Painting of Castings Paint Booth consisting of emission point 46 is limited to 500 gallons per rolling 12 month period of solvent usage.
6. This paint booth is limited to the spraying or operation of one (1) paint gun at any time.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Retain Material Safety Data Sheets (MSDS) of all paints and solvents used in the Spray Paint Booth.
2. Record the quantity of paint and solvent used in a rolling 12-month period.
3. Maintain records documenting maintenance of control equipment.

Authority for Requirement: Iowa DNR Construction Permit 02-A-141

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet from the ground): 23
Stack Diameter (inches): 44
Stack Exhaust Flow Rate (scfm): 34,300
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-141

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant – PM_{10}

1st Stack Test to be Completed by (date) – within 90 days after issuance of Iowa DNR Construction Permit 02-A-141. *Note: 02-A-141 was issued February 28, 2002. Testing has been scheduled with the Department.*

Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]

[(1)] or an approved alternative

Authority for Requirement – Iowa DNR Construction Permit 02-A-141

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment: Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Spray Booth Filter Agency Operation & Maintenance Plan

Weekly

Inspect the spray booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material. Maintain a written record of the observation and any action resulting from the inspection.

Record Keeping and Reporting

Maintenance and inspection records will be kept for five years and be available upon request.

Quality Control

The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 49

Associated Equipment

Associated Emission Unit ID Numbers: 77, 78, 79, 80, 81, and 82
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
49	77	Casting Welding	Welding Wire/Rods	1 lb./hr
	78	Casting Welding	Welding Wire/Rods	2 lb./hr
	79	Casting Welding	Welding Wire/Rods	2 lb./hr
	80	Casting Welding	Welding Wire/Rods	2 lb./hr
	81	Casting Welding	Welding Wire/Rods	2 lb./hr
	82	Casting Welding	Welding Wire/Rods	2 lb./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 50, 51, 52

Associated Equipment

Associated Emission Unit ID Numbers: 83, 84, 85, 86
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
50	83	Casting Welding	Welding Wire/Rods	2 lb./hr
	84	Casting Welding	Welding Wire/Rods	2 lb./hr
51	85	Sand Bulk Loading	Sand	25 tons/hr
52	86	Sand Storage Pile	Sand	3.25 acres

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 53, 54, 55

Associated Equipment

Associated Emission Unit ID Numbers: 87
Emissions Control Equipment ID Number: none

Applicable Requirements

EP = Emission Point EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
53	87	Burn-Off Bench #1	Natural Gas	0.002 MMcf/hr
54	88	Burn-Off Bench #2	Natural Gas	0.002 MMcf/hr
55	89	Burn-Off Bench #3	Natural Gas	0.002 MMcf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %
Authority for Requirement: 567 IAC 23.3(2)"d

Pollutant: Particulate Matter
Emission Limits: 0.1 gr/scf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 57

Associated Equipment

Associated Emission Unit ID Numbers: 91
Emissions Control Equipment ID Number: none

Applicable Requirements

Emission Unit vented through this Emission Point: 91
Emission Unit Description: Space Heaters
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.03 MMcf/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 58

Associated Equipment

Associated Emission Unit ID Numbers: 92
Emissions Control Equipment ID Number: 58
Emissions Control Equipment Description: Cyclone

Applicable Requirements

Emission Unit vented through this Emission Point: 92
Emission Unit Description: Grinding of Castings
Raw Material/Fuel: Steel
Rated Capacity: 1 ton/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 74

Associated Equipment

Associated Emission Unit ID Numbers: 74
Emissions Control Equipment ID Number: none

Applicable Requirements

Emission Unit vented through this Emission Point: 74
Emission Unit Description: Rust-Proofing of Castings
Raw Material/Fuel: Oil
Rated Capacity: 0.005 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

No emission limits at this time.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic

progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident

of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the

changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act.

e. The changes comply with all applicable requirements.

f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person

identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the

existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1004 W. Madison
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

APPENDIX A

DNR Air Quality Policy 3-b-08 (Opacity Limits)